



BUILDING AND STRUCTURAL DESIGN CRITERIA

The purpose of this guideline is to provide a summary of the code adoption and design criteria applicable to the City of Milpitas. The design criteria shall be used as the basis for building and structural design of structures proposed in this jurisdiction.

Building Design Criteria

- 2010 California Building Code (CBC)
- 2010 California Residential Code (CRC) (For detached one and two-family dwelling, townhouse not more than three stores above grade in height)
- 2010 California Mechanical Code (CMC)
- 2010 California Electrical Code (CEC)
- 2010 California Plumbing Code (CPC)
- 2010 California Energy Code (CEnc)
- 2010 California Fire Code (CFC)
- 2011 Milpitas Municipal Code (MMC)

Structural Design Criteria

- **Wind Speed:**
 - General = 85 mph (3 second gust)
 - Hillside = 95 mph (3 second gust)
- **Wind Exposure Category:**
 - General = B
 - Hillside = C
- **Seismic Design Category:** D for 2010 CBC, D₂ for 2010 CRC
- **Foundation Design Parameters:**

The following foundation design parameters shall be used unless higher values are justified by a soils report:

Footing

- Allowable Soil Bearing Pressure = 1500 psf
- Allowable Lateral Bearing Pressure = 100 psf/ft below natural grade
- Allowable Sliding Resistance = (130 psf x D x A), not to exceed (0.5 x DL)
 - where D = footing depth below natural grade
 - A = footing/soil contact area
 - DL = dead load on footing

Pier/Poles

- Allowable Frictional Resistance for Piers = 250 psf
- Allowable Lateral Bearing Pressure for Isolated Poles (for uses such as flagpoles, signs and fences that are not adversely affected by a 0.5" motion at the ground surface due to short-term lateral load) = 266 psf/ft

Energy Design Criteria

- **Climate Zone:** 4